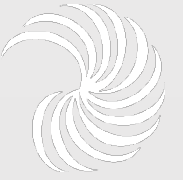


Towards a Higher Levels of Automation in ATM, Increasing Automation in the Aviation Sector.

Presented by: Francisco Javier Sáez Nieto,
Madrid, March 2015

CONTENT:



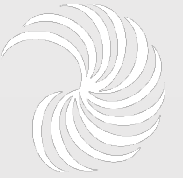
- ❑ Who we are,
- ❑ Hala! Objectives,
- ❑ Automation and ATM,
- ❑ Modelling ATM as socio-technical multi-agent system,
- ❑ Automation applied to ATM,
- ❑ Summary

WHO WE ARE



- ❑ Research Network established within the framework of SESAR WPE to spearhead long term and innovative research in ATM in pursuit of the SESAR 2020 vision and beyond. HALA! is acronym for “Higher Automation Levels in ATM”. It commenced its activities in 2010.
- ❑ HALA! provides a flexible environment in which ideas on Automation in ATM will flow using a common approach by removing most of the constraints on other research carried out in SESAR.

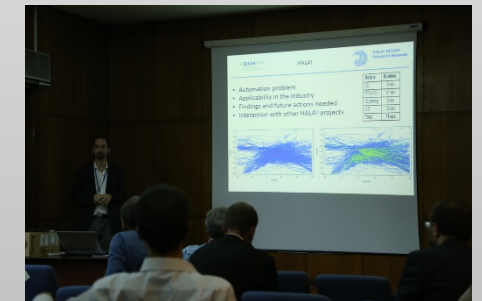
WHO WE ARE: MEMBERS



Hala! Currently have more than 400 participants

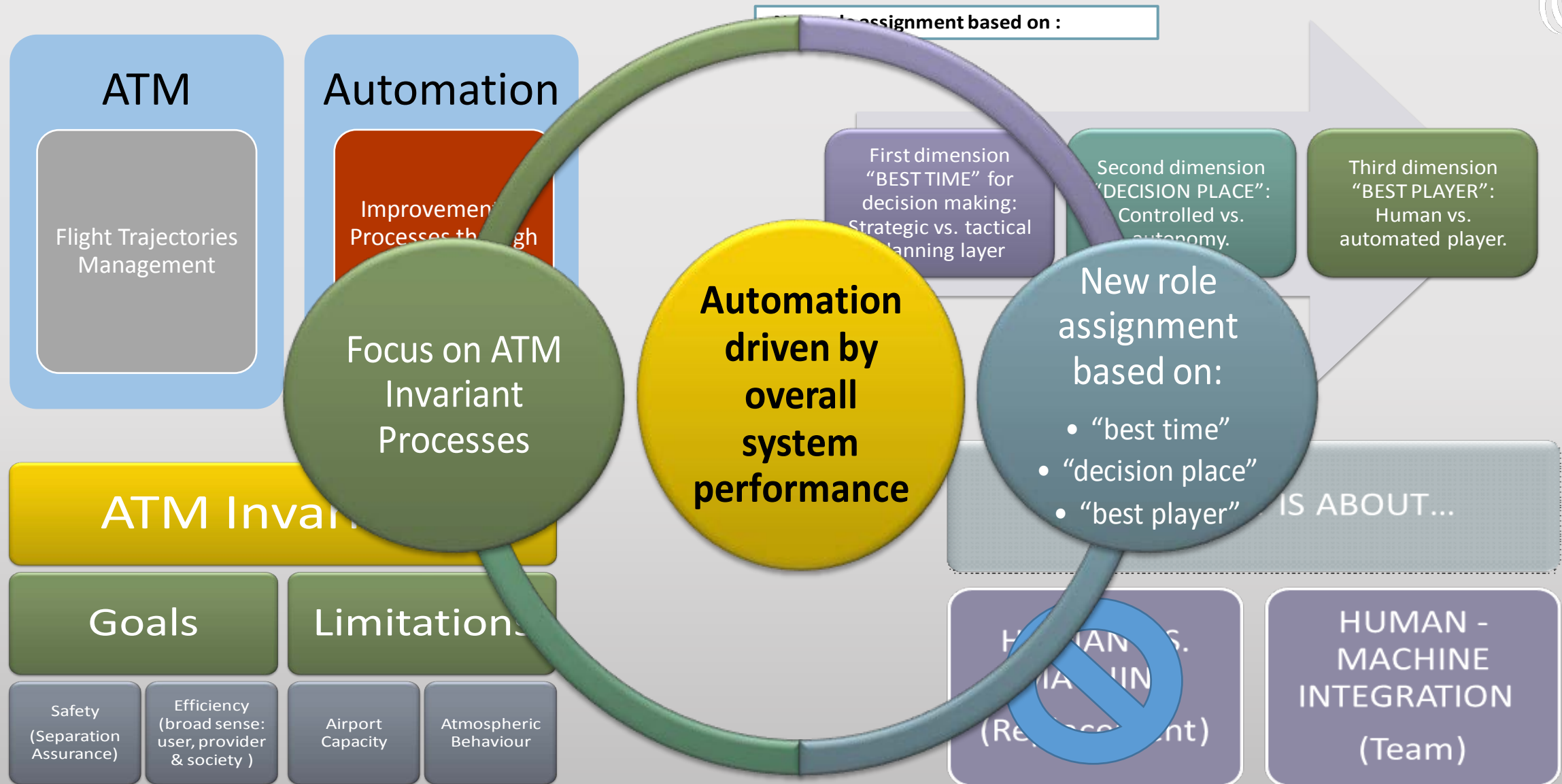
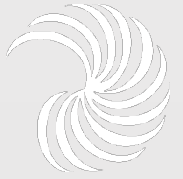
WHO WE ARE: ACTIVITIES

- ❑ Calls for different WP-E research projects,
- ❑ ATM workshops, conferences and seminars organised by the ATM community
- ❑ Guide dedicated PHD research in HALA! areas of interest,
- ❑ Annually organizing ATACCS(*) congress,
- ❑ The organisation of a yearly HALA! Summer school, on different topics related to HALA! areas of research,
- ❑ Issuing Hala! Position Paper.

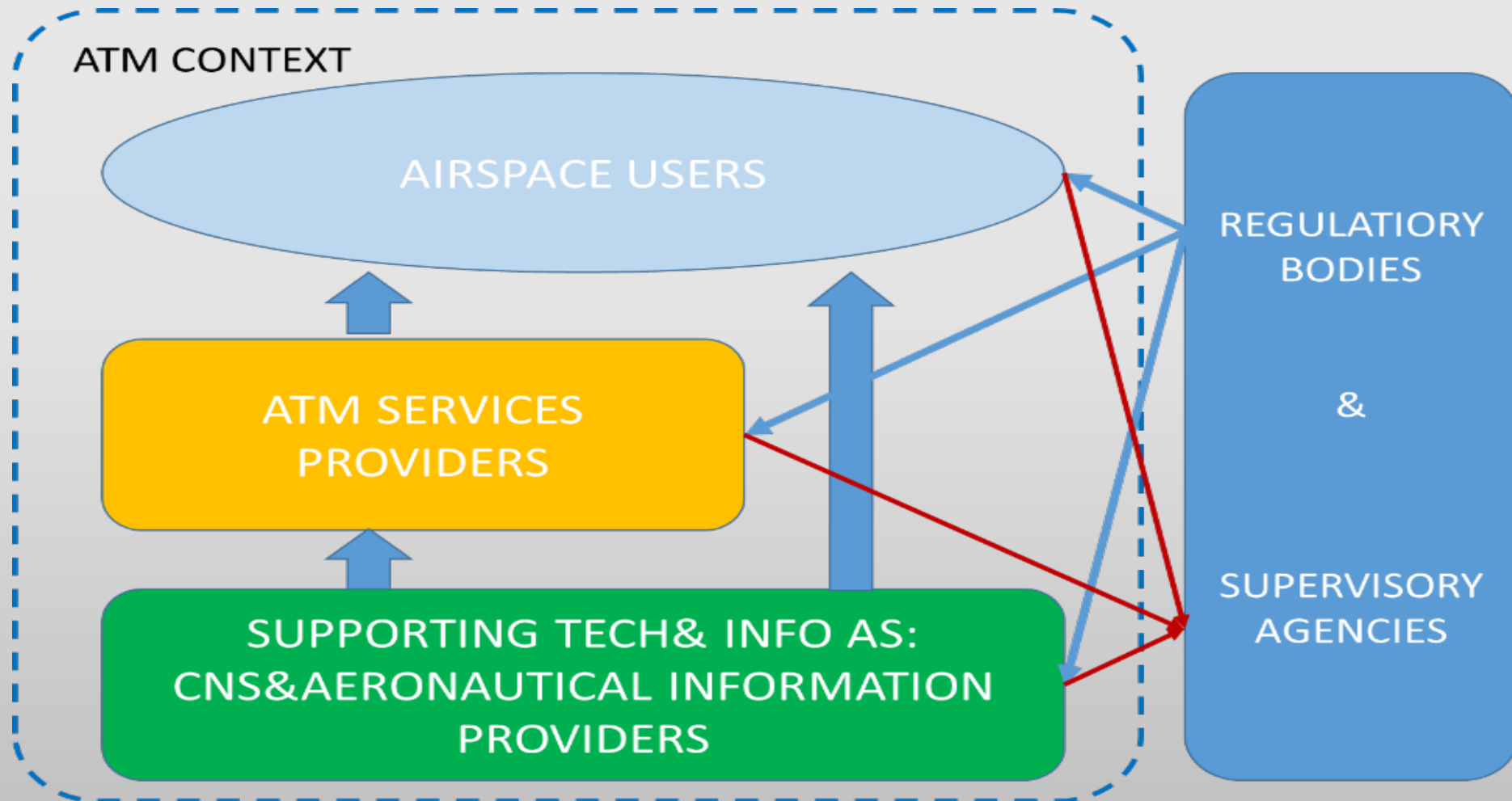
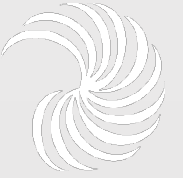


(*)International Conference on Application and Theory of Automation in Command and Control Systems

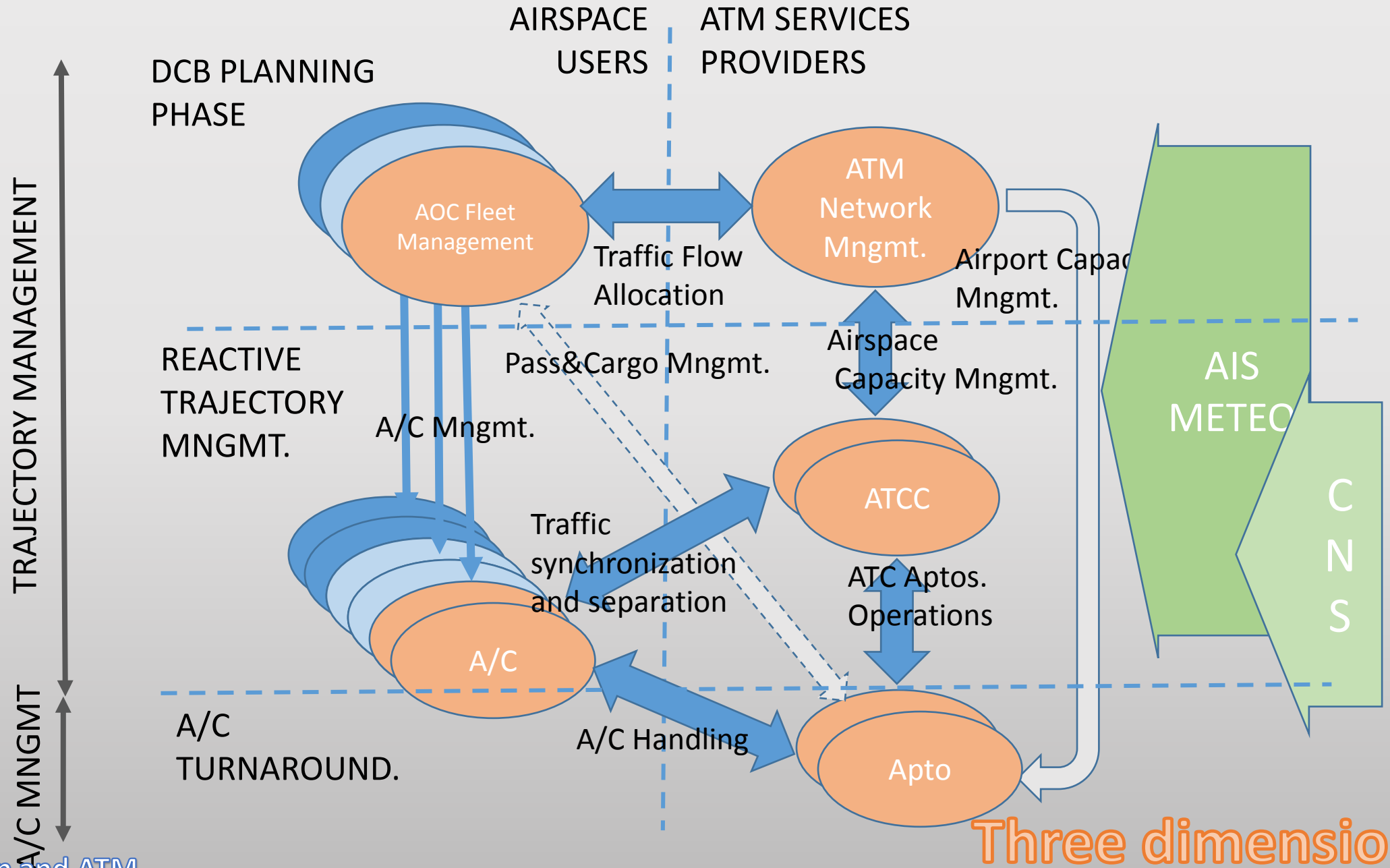
AUTOMATION AND ATM



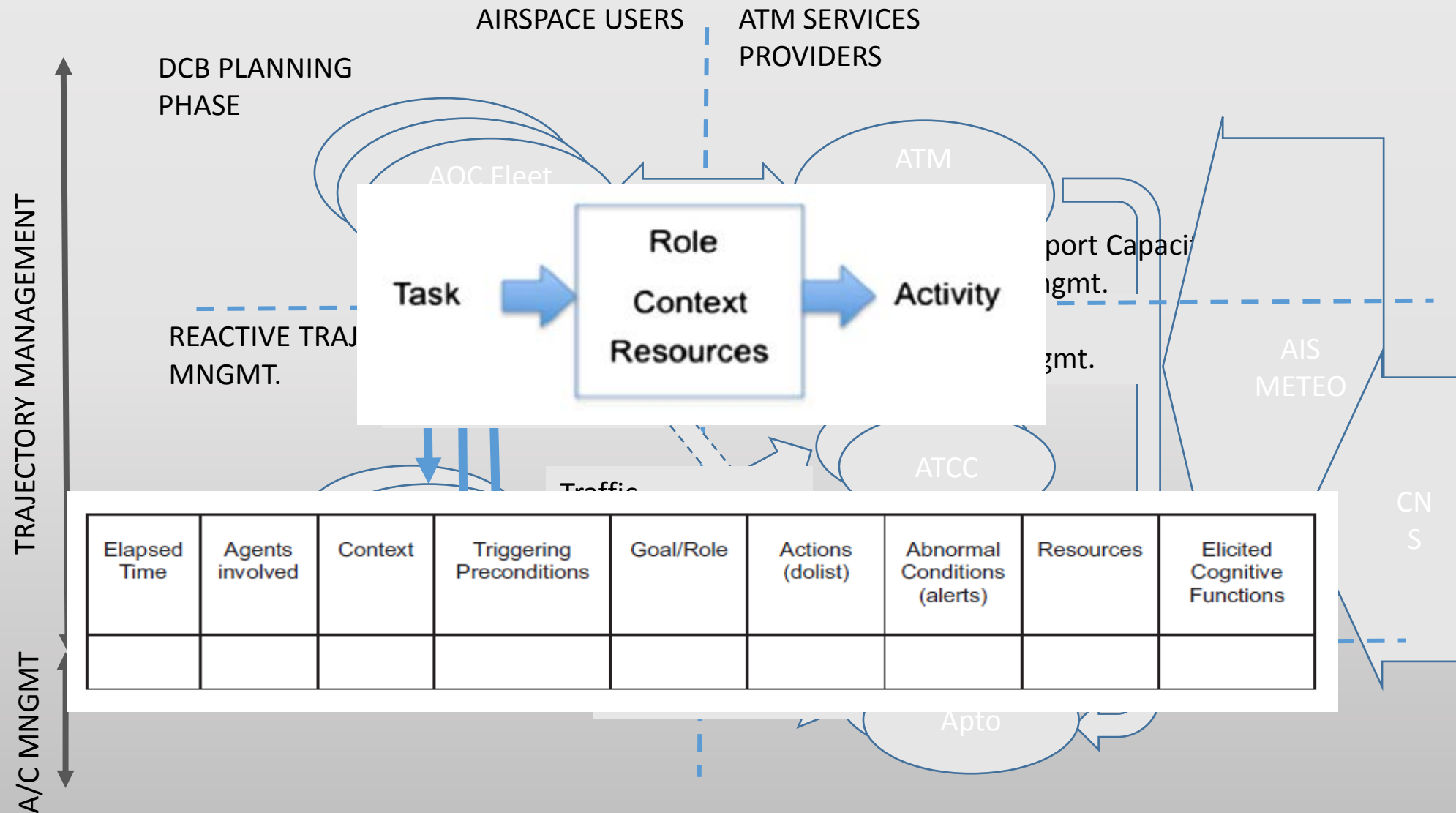
ATM ACTORS



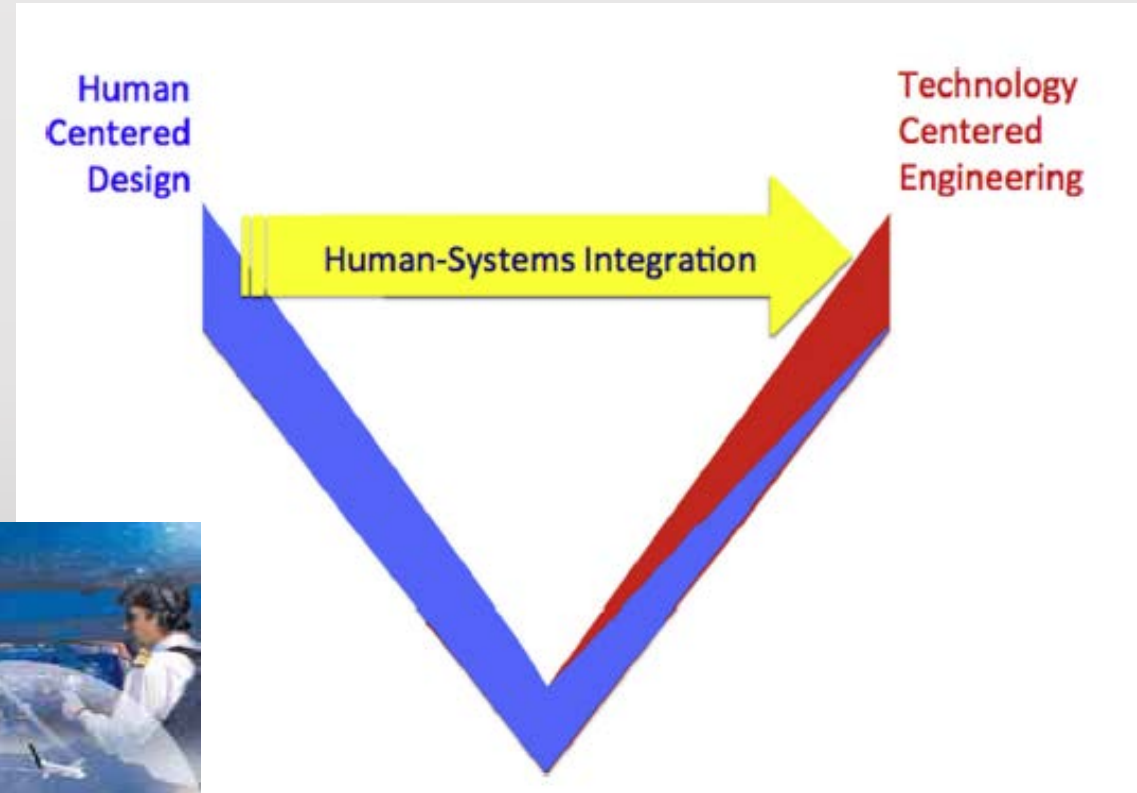
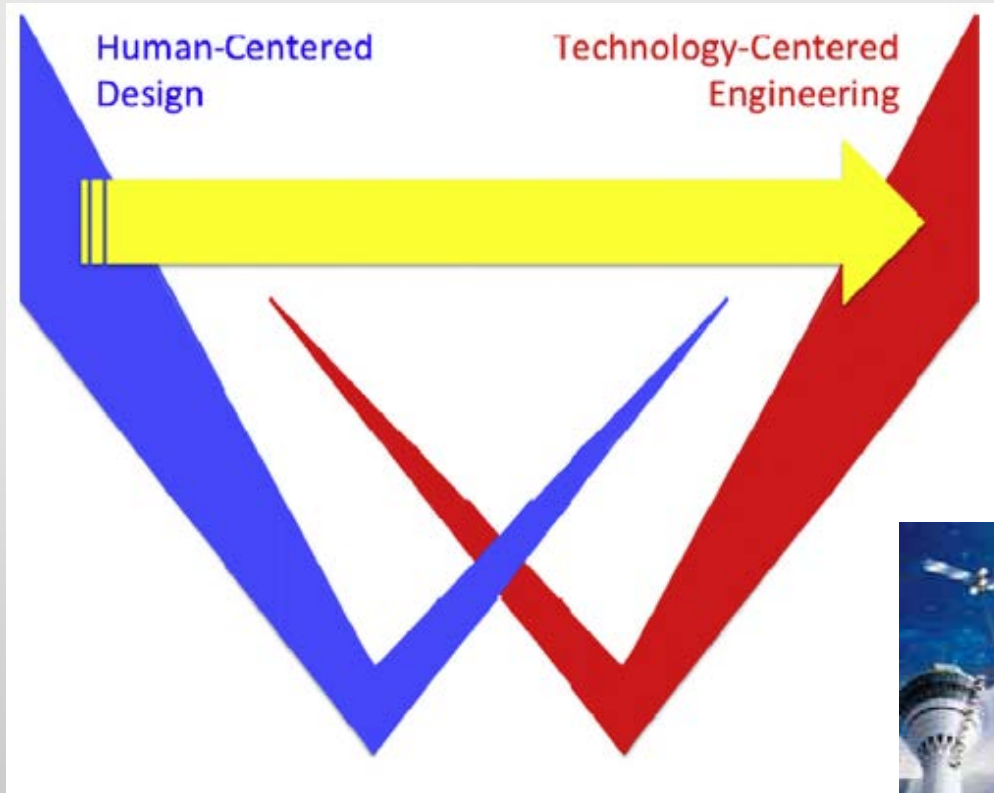
ATM FUNCTIONAL/OPERATIONAL ARCHITECTURE



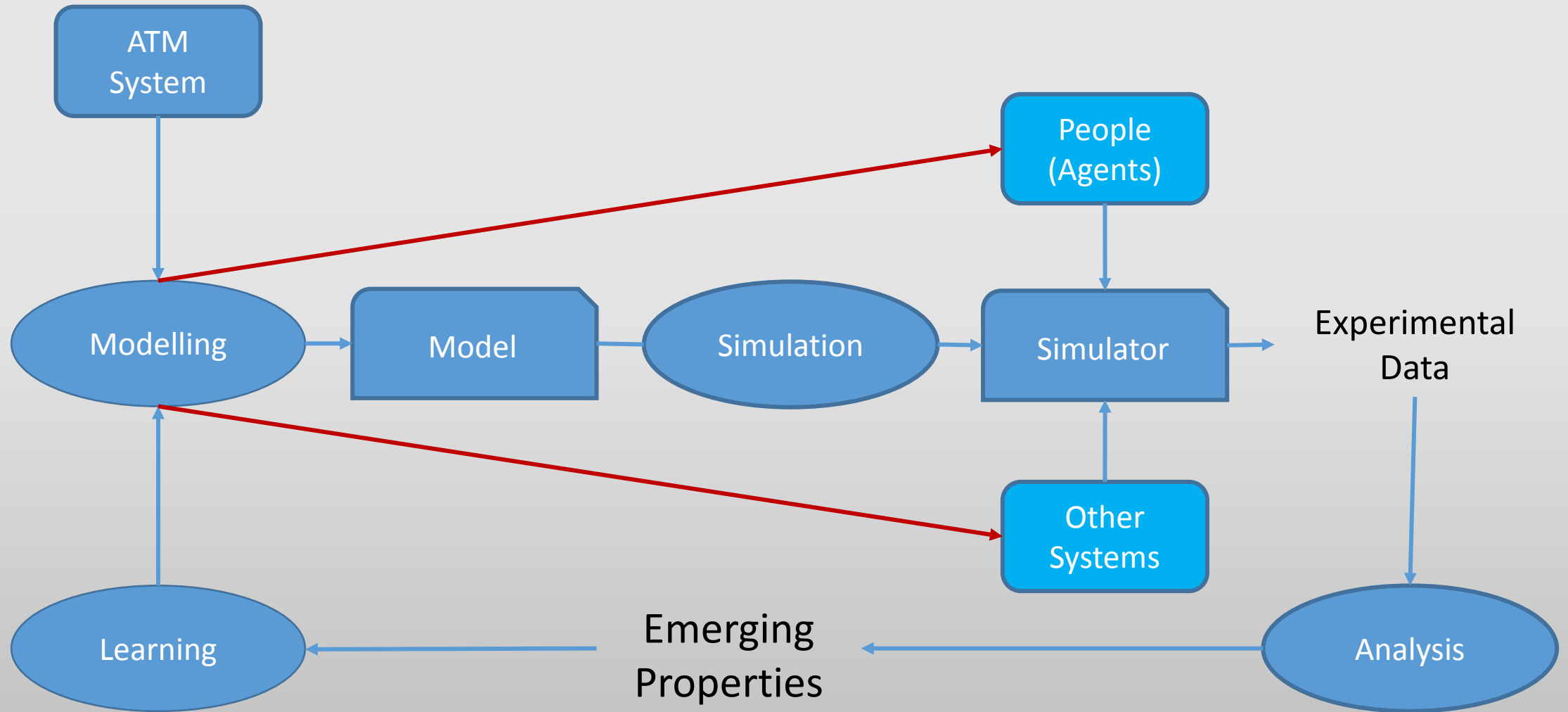
ATM AS SYSTEM OF SYSTEMS COMPOSED BY COGNITIVE FUNCTIONS

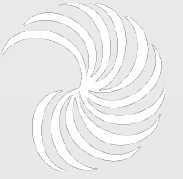


COMBINING HUMAN CENTRED DESIGN AND TECHNOLOGY CENTRED ENGINEERING



APPLYING HSI BY ITERATING: M&S





SUMMARY:

- ❑ Re modelling ATM as socio-technical multi-agent system,
- ❑ Focussing Automation research into ATM, orchestration, separability, HIS-M&S

